Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response

America's wastes will be stored, treated and disposed of in ways that prevent harm to people and to the natural environment. EPA will work to clean up previously polluted sites, restore them to uses appropriate for surrounding communities, and respond to and prevent waste-related or industrial accidents.

Background and Context

Improper management of wastes can lead to serious health threats due to contamination of air, soil, and water, and as a result of fires and explosions. Likewise, improper waste management and disposal can pose threats to those living in nearby communities and can result in costly cleanups. One of the Agency's strategic goals is to ensure proper waste management and disposal to protect human health, endangered wildlife, vegetation, and natural resources from unacceptable risk posed by solid and hazardous wastes. In FY 2003, EPA will continue to promote safe waste storage, treatment, and disposal, cleanup active and inactive waste disposal sites, and prevent the release of oil and chemicals, including radioactive waste, into the environment.

Means and Strategy

EPA and its partners will continue their efforts to achieve this goal by promoting better waste management, cleaning up contaminated waste sites, and preventing waste-related or industrial accidents. To date, EPA and its partners have made significant progress toward achieving its two primary objectives that address human health and the environment at thousands of Superfund, Brownfields, Resource Conservation and Recovery Act (RCRA), underground storage tank (UST), and oil sites. Brought together by our common interest to protect our health, environment, and livelihoods, EPA and its partners have established an effective structure to manage the nation's hazardous and solid wastes.

To achieve this goal, EPA seeks to further reduce or control the unacceptable risks posed to human health and the environment through better waste management and restoration of abandoned waste sites. In partnership with states, tribal governments, the public, and other stakeholders, EPA will reduce or control the risks to human health and the environment at thousands of Superfund, Brownfields, RCRA, and UST sites. EPA's strategy is to apply the fastest, most effective waste management and cleanup methods available, while involving affected communities in the decision making process. The Agency will employ enforcement efforts to further assist in reducing risk to humans from hazardous waste exposure.

In FY 2003, EPA will focus on four overarching themes in achieving its objectives:

- Homeland Security: Enhancing EPA's accident prevention, emergency preparedness, and emergency response programs to ensure the safety and health of the public, program personnel, and other emergency response personnel. The Agency will then be able to provide appropriate and timely crisis and consequence management related to weapons of mass destruction.

- Revitalization: Broad promotion of the successes and lessons learned by the brownfields program and other waste program revitalization efforts, and how revitalization can complement our traditional cleanup programs and lead to faster cleanups and productive reuse of properties.

- One Cleanup Program: Creating a national dialogue on the future of Superfund and other

waste/cleanup programs. Continue progress in cleanups while increasing consistency and transparency across programs.

- Recycling, Waste Minimization and Energy Recovery: Promotion of recycling, waste minimization and energy recovery for both hazardous and non-hazardous wastes.

Homeland Security

In support of Homeland Security, the Agency is requesting $86 million to strengthen the Agency's preparedness, response structure and improve state and local emergency response capabilities, continue operations of the Environmental Response Team Center West (ERTC-West), and research decontamination of buildings resulting from a release of biological agents.

Through the ERTC-West, the Superfund Program will maintain an around-the-clock emergency response activation system to support regions and states in the western part of the country. The ERT provides critical technical support services to EPA's response personnel in the field. These services include: environmental monitoring, decontamination, technical assistance on hazardous and radiation emergencies, and support to FBI-led response teams. The ERT also offers technical training to Federal, State, and local government officials in the latest response technology.

EPA plays a vital role in helping to protect the American people from hazardous substances releases as well as the highly dangerous agents (chemical, biological, radiological) associated with acts of terrorism. Any major terrorism event, whether it involves explosives, conventional hazardous materials or radiological, chemical or biological agents, will necessitate an EPA response to, first, assess the risks to public health, the environment and to response workers, second, to manage and mitigate the hazards of residual contamination, and, third, to conduct assessments of the adequacy of the response sufficient to allay the concerns of the public who will re-occupy the affected area. Currently, EPA's capability to conduct such responses resides in our Emergency Response program.

The Agency's chemical emergency preparedness and prevention (CEPP) program complements EPA's emergency response efforts. This program addresses the risks associated with the manufacture, transportation, storage and use of hazardous chemicals to prevent and mitigate chemical releases whether an incident may be accidental or intentional, as is the case in releases caused by terrorist acts. To meet its homeland security obligations the CEPP program works with state agencies and Local Emergency Planning Committees (LEPCs) to help strengthen their capabilities to prepare for and respond to potential incidents of terrorism. The LEPC is a community organization that brings together all entities (first responders, fire departments, hospitals, emergency technicians, planners, industry, the media, and local elected officials) that have primary responsibility for emergency preparedness at the local level. The program also works in partnership with the chemical and petrochemical industry to improve site security and the safe operations of facilities throughout the country.

Within the National Response System, EPA supports a national emergency preparedness and response capability. Under the National Response Team (NRT), Regional Response Team (RRT) and Federal Response Plan (FRP) the Federal government helps states and local governments address major incidents that are beyond their capabilities, including those involving terrorism. EPA chairs the NRT and co-chairs the 13 RRTs throughout the U.S. which integrates actions of all Federal partners to prevent, prepare for and respond to hazardous material releases including chemical, biological and radiological substances. The Agency also participates with other Federal agencies to implement national security, continuity of operations and other homeland security requirements.

The FY 2003 President's Budget requests resources to conduct research on better technologies and assessments to cleanup buildings contaminated by biological and chemical agents. These efforts will include the transfer of technologies and guidance on decontamination processes, evaluation of existing and new cleanup and detection technologies, development of risk assessment methodologies, and production of rapid decontamination techniques and technologies.

Revitalization

To address the theme of revitalization, EPA is requesting $200,000,000 to implement the Small Business Liability Relief and Brownfields Revitalization

and Environmental Restoration Act (H.R. 2869), signed by President Bush on January 11, 2002. Brownfields are abandoned, idled, or underused industrial and commercial properties and are not traditional Superfund sites. Generally, Brownfields are not highly contaminated and, therefore, present lesser health risks. Economic changes over several decades have left thousands of communities with these contaminated properties and abandoned sites. This legislation promotes brownfields redevelopment by providing financial assistance for assessment and cleanup, reforming Superfund liability and enhancing state response programs. The legislation was the top environmental priority of the Administration and EPA will be working with Congress, other Federal agencies, states, tribes, local governments, the private sector and non-profit organizations on its implementation. In addition to the activities which have been carried out in the past, the new legislation will expand EPA's ability to address sites contaminated with petroleum and permit EPA to establish grants for brownfields cleanup.

EPA is committed to integrating the concept of revitalization and reuse into the process of cleaning up abandoned, inactive and contaminated waste sites, active and closing Federal facilities, and other properties. An essential element of the assessment and cleanup of contaminated property, whether they are Brownfields, Superfund, RCRA Corrective Action, Base Realignment and Closure, Federal facilities or USTs, is the ultimate goal of revitalizing and reusing that property. Although assessment and cleanup provide clear environmental benefits in mitigating exposure to hazardous contaminants, the ultimate goal is the reuse of these properties to improve the quality of life in America's communities. Building upon the Agency's recent successes in this area, EPA's waste cleanup programs will actively seek out opportunities to leverage public or private investment, create jobs associated with reuse, and increase the overall acreage reused.

One Cleanup Program

In support of the one cleanup program theme, the Superfund program works with States, Tribes, local governments, and other Federal agencies to protect human health and the environment and to restore sites to uses appropriate for nearby communities. Many of the nations largest and most technically complex contaminated properties including abandoned, private, and Federal facilities are cleaned up by the Superfund Program. Site assessment is the first step in determining whether a site meets the criteria for placement on the National Priorities List (NPL) or for removal action to prevent, minimize or mitigate significant threats. When a site is placed on the NPL it becomes eligible for a fund-financed cleanup. The Agency also provides outreach and education to the surrounding communities to improve their understanding of potential site risk, such as risks posed by radioactive materials, and to promote direct involvement in every phase of the cleanup process.

One of the Superfund program's major goals is to have responsible parties pay for and conduct cleanups at abandoned or uncontrolled hazardous waste sites. The Superfund enforcement program maximizes Potentially Responsible Party (PRP) participation and is committed to reforms, which increase fairness, reduce transaction costs, and promote economic redevelopment. The Agency also seeks to recover costs associated with a site cleanup from responsible parties when Superfund trust fund monies have been expended.

The RCRA corrective action program addresses a significant number of industrial sites, including Federally-owned facilities. Administered by EPA and authorized states, these sites include some of the most intractable and controversial cleanup projects in the country. Approximately 3,500 industrial facilities must undergo a cleanup under the RCRA program. Of these facilities, EPA and state partners have identified over 1,700 facilities as high priority because people or the environment are likely to be at significant current or future risk. As evidence of success in meeting this challenge, EPA and the states have now documented that both exposure to contamination and further migration of contaminated groundwater have been controlled at over 600 of the 1700 high priority facilities.

The RCRA corrective action program continues to emphasize redevelopment of RCRA corrective action sites to prevent these properties from becoming Brownfields (unused or underused property due to perceived concerns regarding hazardous waste contamination). Through its nine active pilots, the RCRA Brownfields Prevention Pilot program showcases the implementation of the RCRA corrective action reforms and the use of innovative approaches to cleanup activities. In addition, the RCRA program also sponsors

a Targeted Site Effort (TSE) to focus a small amount of funds at specific sites to give assistance in moving forward in the corrective action process.

In partnership with the states, the Agency prevents releases, detects releases early in the event they occur, and addresses leaks from USTs containing petroleum and hazardous substances. The strategy for achieving this goal is to promote and enforce compliance with the regulatory requirements aimed at preventing and detecting UST releases, thereby protecting our nation's groundwater. While the vast majority of the approximately 700,000 active USTs have the proper equipment per Federal regulation, significant work remains to be done to ensure UST owners and operators properly maintain and operate their systems. The Agency's role is to work with states to promote compliance with the spill, overfill, and corrosion protection requirements, and ensure that the leak detection requirements are a national priority. This encompasses compliance for all Federally-regulated UST systems, including those on private and public property, in Indian Country, and Federal facilities. The Agency has primary responsibility for implementing the UST program in Indian Country.

The Leaking Underground Storage Tank (LUST) Program will continue its progress by promoting rapid and effective responses to releases from USTs containing petroleum. EPA plays a key role in implementing the national LUST Program by supporting the management of state, local, and tribal enforcement and response capability, as well as, sharing lessons learned with state regulators and the regulated community to increase cleanup accomplishments. The Agency's highest priorities in the LUST program over the next several years is to address approximately 150,000 cleanups that have yet to be completed, and to address methyl-tertiary-butyl-ether (MTBE) contamination which states are increasingly discovering, and which pose unique and often difficult remediation challenges.

Recycling, Waste Minimization, and Energy Recovery

In support of the recycling, waste minimization and energy recovery theme, the RCRA program will focus on improving current waste management practices, providing greater regulatory flexibility and promoting opportunities for converting waste to future energy and raw material sources. In FY 2003, EPA will undertake a comprehensive review of its waste management programs and regulations regarding hazardous and non-hazardous waste recycling, waste minimization and energy recovery practices. The review objective will be to identify opportunities to further the goal of resource conservation and recovery, while remaining true to the mission of ensuring safe and protective waste management practices.

Other elements of the Better Waste Management goal are associated with the promotion of safe waste management practices, which serve to avoid future cleanup and redevelopment burdens. For facilities that currently manage hazardous wastes, EPA and the authorized states ensure human health and environmental protection through the issuance of RCRA hazardous waste permits. The RCRA program works primarily through state partners to reduce the risks of exposures to dangerous hazardous wastes by maintaining a "cradle-to-grave" waste management framework. Under this framework, EPA and the states oversee the handling, transport, treatment, storage, and disposal of hazardous waste, ensuring that communities are not exposed to hazards through improper management. Hazardous waste management facilities with appropriate controls in place have made significant progress in minimizing the threat of exposure to hazardous substances. To date, 48 states, Guam, and the District of Columbia are authorized to issue permits. State authorization for all portions of the RCRA program, including regulations that address waste management issues included in permits, is an important Agency goal. The RCRA program strives to achieve greater efficiencies by adapting new innovative technologies that not only streamline permitting processes and better protect our land but also provide greater regulatory flexibility and opportunity for converting waste to future energy and raw material sources.

The Agency's chemical emergency preparedness and prevention program addresses some of the risks associated with the manufacture, transportation, storage and use of hazardous chemicals to prevent and mitigate chemical releases, whether an incident may be accidental or intentional, as is the case in a terrorist event. The program also implements right-to-know initiatives to inform the public about chemical hazards and encourages actions at the local level to reduce risk. Section 112(r) of the Clean Air Act requires an estimated

16,000 facilities to develop comprehensive risk management plans (RMPs) and submit them to EPA, state agencies, and Local Emergency Planning Committees. The Agency believes that states are best suited to implement the RMP program because they benefit directly from its success and they often have established relationships with the communities that may be at risk.

The Oil Spill Program prevents, prepares for, responds to, and monitors oil spills as mandated and authorized in the Clean Water Act and Oil Pollution Act of 1990. EPA protects U.S. waterways through oil spill prevention, preparedness, and enforcement compliance. There are 465,000 non-transportation-related oil storage facilities that EPA regulates. When necessary, the Agency undertakes oil spill response in the inland zone which is then funded through a reimbursable agreement with the U.S. Coast Guard.

Finally, The Agency has established performance objectives specific to Indian Tribes and Alaska Native Villages. These objectives stress waste prevention and cleanup and assistance to Tribes. To meet these objectives, EPA will identify Tribal needs, support and promote the involvement of Tribes in implementation activities, and control risks in Indian Country through assessment and clean up of contaminated sites in consultation and partnership with Tribes.

Research

The FY 2003 waste research program supports the Agency's objective of reducing or controlling potential risks to human health and the environment at contaminated waste sites by accelerating scientifically defensible and cost-effective decisions for cleanup at complex sites, mining sites, marine spills, and Brownfields in accordance with CERCLA. Research will: 1) provide improved methods and dose-response models for estimating risks from complex mixtures contaminating soils and groundwater; 2) provide improved methods for measuring, monitoring, and characterizing complex waste sites in terms of soils and groundwater; 3) develop more reliable technologies for cleanup of contaminated soils, groundwater, and sediments; and 4) determine the effects of contaminants on the environment. A new effort in Homeland Security will also begin in FY 2003 and focus on critical issues, such as the decontamination of buildings, in order to prevent and respond to future instances of bioterrorism.

Waste identification, waste management, and combustion constitute the three major areas of research under RCRA in FY 2003, as the Agency works towards preventing releases through proper facility management. Waste identification research will focus on multimedia, multi-pathway exposure modeling and environmental fate and transport; physical estimation in support of risk-based exemption levels for wastes; development of targeted exemptions of waste streams that do not pose unacceptable risks; and efforts to streamline the waste de-listing process. These efforts could significantly reduce compliance costs while still supporting EPA's mission to protect human health and the environment. Waste management research will focus on developing more cost-effective ways to manage/recycle non-hazardous wastes and will examine other remediation technologies, while combustion research will continue to focus on characterizing and controlling emissions from waste combustion.

External Factors

There are a number of external factors that could substantially impact the Agency's ability to achieve the outlined objectives under this goal. These include reliance on private party response and State partnerships, development of new environmental technology, work by other federal agencies, and statutory barriers.

The Agency's ability to achieve its goals for Superfund construction completion is partially dependent upon the performance of cleanup activities by other Federal agencies, such as the Department of Defense (DOD) and the Department of Energy (DOE). In addition to the construction completion goal, the Agency must rely on the efforts of DOD and DOE to establish and maintain the Restoration Advisory Boards (RABs)/Site Specific Advisory Boards (SSABs). RABs and SSABs provide a forum for stakeholders to offer advice and recommendations on the restoration of Federal Facilities. There are other EPA goals that rely on activities with other entities, such as PRP negotiations and agreements with States and Tribes.

For the RCRA program, the Agency's ability to achieve its release prevention and cleanup goals is heavily dependent on state participation. In most cases,

states have received authorization (hazardous waste management program) or approval (municipal solid waste landfill permit program) and are primary implementors of these programs. As such, EPA relies on states to perform many of the activities needed to achieve these targets. State programs are also primarily responsible for implementing the UST/LUST program. The Agency's ability to achieve its goals is dependent on the strength of state programs and state funding levels. The Agency will build upon its commitment to provide states and tribes with technical support and incentives to meet national LUST cleanup targets. Technical support and incentives range from promoting multi-site cleanup agreements, conducting cleanup pilots to test the benefits of incentive-based cleanups, such as pay-for-performance contracting and providing other tools to help states and the tribes achieve faster, less expensive, and more effective LUST cleanups.

For the risk management and Homeland Security programs, the Agency recognizes that accident prevention and response, as well as preparedness for terrorist incidents, are inherently local activities. To succeed, the program relies on the commitment and accomplishments of the various stakeholders, including industry, state and local government, and other Federal partners. EPA's success will depend upon the willingness and ability of stakeholders to deliver on the commitments and obligations in their plans. EPA plays a key role, but neither controls the resources nor sets the priorities to ensure that all Federal, state and local participants are engaged at a level that will ensure our commitments are met.

Resource Summary

(Dollars in Thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request
Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response	**$1,685,622.1**	**$1,520,683.8**	**$1,711,279.8**
Control Risks from Contaminated Sites and Respond to Emergencies	**$1,524,914.9**	**$1,397,140.9**	**$1,544,018.6**
Environmental Program & Management	$61,220.7	$67,012.0	$90,464.8
Hazardous Substance Superfund	$1,308,981.8	$1,175,519.4	$1,166,199.3
Leaking Underground Storage Tanks	$69,762.9	$70,842.7	$70,100.2
Oil Spill Response	$876.6	$905.2	$909.9
Science & Technology	$51,393.2	$47,948.5	$5,931.3
State and Tribal Assistance Grants	$32,475.3	$34,913.1	$210,413.1
Superfund Reimbursables	$204.4	$0.0	$0.0
Regulate Facilities to Prevent Releases	**$160,707.2**	**$165,842.9**	**$167,261.2**
Environmental Program & Management	$97,901.0	$102,477.9	$103,863.6
Hazardous Substance Superfund	$91.1	$217.1	$226.3
Oil Spill Response	$13,678.3	$13,596.0	$14,166.0
Science & Technology	$8,730.9	$10,095.3	$9,548.7
State and Tribal Assistance Grants	$40,305.9	$39,456.6	$39,456.6
Total Workyears	**4,316.4**	**4,308.5**	**4,498.7**

Objective 1: Control Risks from Contaminated Sites and Respond to Emergencies

By 2005, EPA and its federal, state, tribal, and local partners will reduce or control the risk to human health and the environment at more than 374,000 contaminated Superfund, RCRA, underground storage tank (UST), and brownfield sites and have the planning and preparedness capabilities to respond successfully to all known emergencies to reduce the risk to human health and the environment.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$14,390.0	$0.0	$0.0	$0.0
Assessments	$79,417.5	$76,472.9	$76,236.3	($236.6)
Brownfields	$92,540.3	$97,632.7	$199,768.9	$102,136.2
Capacity Building	$755.4	$725.1	$652.6	($72.5)
Civil Enforcement	$0.0	$612.2	$582.1	($30.1)
Compliance Assistance and Centers	$1,174.3	$670.0	$689.8	$19.8
Congressionally Mandated Projects	$7,225.4	$8,815.0	$0.0	($8,815.0)
Facilities Infrastructure and Operations	$44,107.7	$50,320.3	$45,816.0	($4,504.3)
Federal Facilities	$30,622.0	$31,206.5	$31,915.5	$709.0
Federal Facility IAGs	$8,455.1	$8,784.7	$9,091.7	$307.0
Federal Preparedness	$9,728.2	$9,849.3	$9,883.0	$33.7
Hazardous Substance Research:Hazardous Substance Research Centers	$4,527.7	$4,576.8	$4,599.2	$22.4
Hazardous Substance Research:Superfund Innovative Technology Evaluation (SITE)	$6,554.0	$6,501.0	$6,545.0	$44.0
Homeland Security	$3,194.0	$45,485.4	$86,310.4	$40,825.0
Homestake Mine	$0.0	$0.0	$8,000.0	$8,000.0

LUST Cleanup Programs	$10,055.4	$10,067.4	$10,285.4	$218.0
Leaking Underground Storage Tanks (LUST)Cooperative Agreements	$58,341.3	$59,331.9	$58,341.2	($990.7)
Legal Services	$4,643.6	$4,610.7	$5,077.4	$466.7
Management Services and Stewardship	$13,538.0	$27,997.8	$29,308.3	$1,310.5
Other Federal Agency Superfund Support	$10,676.5	$10,676.0	$10,676.0	$0.0
Planning and Resource Management	$26.4	$0.0	$0.0	$0.0
RCRA Corrective Action	$41,150.9	$38,262.3	$38,965.2	$702.9
RCRA State Grants	$32,736.6	$31,913.1	$31,913.1	$0.0
Radiation	$14,032.7	$14,623.5	$14,899.8	$276.3
Regional Management	$1,209.3	$1,467.0	$1,452.5	($14.5)
Research to Support Contaminated Sites	$30,666.5	$29,896.9	$28,121.1	($1,775.8)
Superfund - Cost Recovery	$29,495.5	$29,477.5	$30,375.9	$898.4
Superfund - Justice Support	$28,437.3	$28,150.0	$28,150.0	$0.0
Superfund - Maximize PRP Involvement (including reforms)	$82,193.9	$81,701.1	$84,396.9	$2,695.8
Superfund Remedial Actions	$493,924.2	$484,659.8	$489,355.0	$4,695.2
Superfund Removal Actions	$198,973.0	$202,654.0	$202,610.3	($43.7)

Annual Performance Goals and Measures

Leaking Underground Storage Tank Cleanups

In 2003 EPA and its partners will complete 22,500 Leaking Underground Storage Tank (LUST) cleanups for a cumulative total of approximately 313,300 cleanups since 1987.

In 2002 EPA and its partners will complete 22,000 Leaking Underground Storage Tank (LUST) cleanups for a cumulative total of approximately 290,000 cleanups since 1987.

In 2001 19,074 LUST cleanups were completed in FY 2001.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
LUST cleanups completed.	19,074	22,000	22,500	cleanups

Baseline: EPA completed a total of 249,760 LUST cleanups from 1987 through 2000.

Superfund Removal Response Actions

In 2003 Conduct 275 Superfund removal response actions for a cumulative total of 7,138 removal response actions since 1982.

In 2002 Conduct 275 Superfund removal response actions for a cumulative total of 6,863 removal response actions since 1982.

In 2001 EPA conduced 302 removal response actions, for a cumulative total of 6,588 over the life of the program.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Removal response actions.	302	285	275	removals
Amount of liquid based waste removed.		no target	no target	gallons
Amount of solid waste removed.		no target	no target	cubic yards

Baseline: EPA completed a total of 6,286 removal response actions from 1982 through 2000.

Superfund Cleanups

In 2003 EPA and its partners will complete 40 Superfund cleanups (construction completions).

In 2002 EPA and its partners will complete 40 Superfund cleanups (construction completions). 47 construction completions were completed in FY 2001.

In 2001 EPA completed construction at 47sites, achieving 804 construction completions over the life of the program.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Construction completions.	47	40	40	completions

Baseline: EPA completed a total of 757 construction completions from 1982 through 2000.

Superfund Cost Recovery

In 2003 Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than $200,000.

In 2002 Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than $200,000.

In 2001

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Refer to DOJ, settle, or write off 100% of Statute of Limitations (SOLs) cases for SF sites with total unaddressed past costs equal to or greater than $200,000 and report value of costs recovered.	97.8	100	100	Percent

Baseline: In FY 98 the Agency will have addressed 100% of Cost Recovery at all NPL & non-NPL sites with total past costs equal or greater than $200,000.

Superfund Potentially Responsible Party Participat

In 2003 Maximize all aspects of PRP particicipation which includes maintaining PRP work at 70% of the new remedial construction starts at non-Federal Facility Superfund, and emphasize fairness in the settlement process.

In 2002 Maximize all aspects of PRP particicipation which includes maintaining PRP work at 70% of the new remedial construction starts at non-Federal Facility Superfund, and emphasize fairness in the settlement process.

In 2001

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Ensure fairness by making Orphan Share Offers at 100% of all eligible settlement negotiations for response work.	100			Percent
Provide finality for small contributors by entering into De Minimis settlements and report the number of settlers.	15			Settlements
PRPs conduct 70% of the work at new construction starts	67.3	70	70	Percent

Baseline: In FY 98 approximately 70% of new remedial work at NPL sites (excluding Federal facilities) was initiated by private parties.

RCRA Corrective Action

In 2003 257 (for a cumulative total of 1,252 or 73%) of high priority RCRA facilities will have human exposures controlled and 172 (for a cumulative total of 1,054 or 61%) of high priority RCRA facilities will have groundwater releases controlled.

In 2002 172 (for a cumulative total of 995 or 58%) of high priority RCRA facilities will have human exposures controlled and 172 (for a cumulative total of 882 or 51%) of high priority RCRA facilities will have groundwater releases controlled.

In 2001 EPA exceeded its RCRA corrective action goal for human exposures controlled with an additional 179 facilities, and came close to achieving its goal for groundwater releases controlled with an additional 154 facilities.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
High priority RCRA facilities with human exposures to toxins controlled.	179	172	257	facilities
High priority RCRA facilities with toxic releases to groundwater controlled.	154	172	172	facilities

Baseline: EPA established a baseline of over 1,700 high priority corrective action facilities in January 1999.

Brownfield Site Assessment Grants

In 2003 EPA will provide additional site assessment funding to 74 new sites, and to 52 existing sites, resulting in a cumulative total of 3,350 properties assessed, the generation of 21,300 jobs, and the leveraging of $5.0 billion in cleanup and redevelopment funds since 1995.

In 2002 EPA will provide additional site assessment funding to 38 new communities, and to 38 existing communities, resulting in a cumulative total of 3,100 properties assessed, the generation of 19,300 jobs, and the leveraging of $4.0 billion in cleanup and redevelopment funds since 1995.

In 2001 FY 2001 third quarter data shows cumulative totals of 2,594 site assessments, generation of 17,307 jobs and leveraging of $3.7 billion in cleanup and redevelopment funds.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Cumulative leveraging of cleanup and redevelopment funds.	$3.7 B	$4.0 B	$5.0 B	funds leveraged
Cumulative jobs generated.	17,307	19,300	21,300	jobs generated
Cumulative site assessments.	2,594	3,100	3,350	assessments

Baseline: By the third quarter of FY 2000, EPA assessed 2,024 sites, generated 7,446 jobs, and leveraged $2.8 billion in cleanup and redevelopment funds.

Brownfield Community Support

In 2003 EPA will provide funding for 30 communities to capitalize revolving loan funds for a cumulative total of 182, provide funding for 10 job training pilots for a cumulative total of 66 and 70% of graduates placed in jobs, and support 28 existing Showcase Communities.

In 2002 EPA will provide funding for 28 communities to capitalize revolving loan funds for a cumulative total of 152, provide funding for 10 job training pilots for a cumulative total of 56 and 70% of graduates placed in jobs, and support 28 existing Showcase Communities.

In 2001 46 communities capitalized 23 new and append 2 existing revolving loan funds. EPA awarded 12 additional showcase community designations, supporting a total of 28 showcase communities. Additionally, EPA awarded 9 new job training pilots.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Showcase communities.	28			communities
Communities served by cooperative agreements to capitalize revolving loan funds.	46			agreements
Job training pilots.	9			pilots
Cumulative communities served by cooperative agreements to capitalize revolving loan funds.		152	182	communities
Cumulative job training pilots.		56	66	pilots
Cumulative showcase communities.		28	28	communities
Percentage of trainees placed.		70	70	percent

Baseline: By the end of 2000, EPA signed 104 agreements for capitalization of revolving loan funds, awarded 37 job training pilots, and provided continued support to 16 showcase communities.

Superfund Intermediate Cleanup Indicators

In 2003 EPA will increase the number of Superfund hazardous waste sites with human exposures and migration of contaminated groundwater under control.

In 2002 EPA will increase the number of Superfund hazardous waste sites with human exposures and migration of contaminated groundwater under control.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Superfund hazardous waste sites with human exposures controlled.		no target	10	sites
Superfund hazardous waste sites with groundwater migration controlled.		no target	10	sites

Baseline: In FY 2001, EPA established a preliminary baseline of 1450 final and deleted NPL sites to monitor for human exposures under control. 1126 (78%) of these 1450 sites have human exposures under control. In FY 2001, EPA established a preliminary baseline of 1204 final and deleted NPL sites to monitor for migration of contaminated groundwater under control. 745 (61%) of these 1204 sites have contaminated groundwater migration under control.

Tribal Cleanup Assistance

In 2003 Complete 45 Leaking Underground Storage Tank (LUST) cleanups in Indian Country for a cumulative total of 617 cleanups since 1987.

In 2003 EPA will continue to emphasize increasing the number of Indian tribes participating in the Superfund program, as expressed through the number of tribes supported by Superfund cooperative agreements with tribes and intertribal consortia.

In 2002 Complete 40 Leaking Underground Storage Tank (LUST) Cleanups in Indian Country for a cumulative total of 572 cleanups since 1987.

In 2002 EPA will continue to emphasize increasing the number of Indian tribes participating in the Superfund program, as expressed through the number of tribes supported by Superfund cooperative agreements with tribes and intertribal consortia.

In 2001 30 LUST cleanups were completed in Indian Country in FY 2001.

In 2001 FY 2001 accomplishments in Indian Country include 11 site assessments, support to 78 tribes through 27 cooperative agreements, provision of $3.8M for capacity building, and tribal leadership or support in responding to 26% of Superfund sites impacting Indian Country.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
LUST cleanups in Indian Country.	30	40	45	cleanups
Site assessments (PA/SI) conducted in Indian country.	11	no target	no target	assements
The number of tribes supported by cooperative agreements with tribes/intertribal consortia.	78	no target	no target	agreements
Funding provided for building tribal capacity.	$3.8M	no target	no target	funding
Percentage of Superfund sites impacting Indian country where a tribe is involved as either the lead or support agency.	26	no target	no target	involvement

Baseline: EPA completed a total of 532 LUST cleanups in Indian Country from 1987 through 2001. The baseline for Superfund activities is currently under development.

Homeland Security

In 2003 EPA will complete the remaining 27 critical facility vulnerability assessments, priortize the risks associated with each facility, and begin mitigation.

In 2003 EPA will improve its overall homeland security readiness capability by 20% by performing enhanced training and exercises and providing state-of-the-art equipment. Percentage improvement will be determined by an annual readiness survey and inspections.

In 2002 Establish a baseline of overall homeland security readiness capabilities through an annual survey mechanism.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Percentage improvement in homeland security readiness.			20	percent
Percentage of LEPCs that have incorporated homeland security prevention and planning into community contingency plans.		no target	no target	percent
Percentage of states that have incorporated homeland security planning into state response systems.		no target	no target	percent

Baseline: Based on FY 2002 performance, baseline is zero for number of critical Agency facilities that have had vulnerability assessments.

Homeland Security

In 2003 EPA will complete the remaining 27 critical facility vulnerability assessments, priortize the risks associated with each facility, and begin mitigation.

In 2003 EPA will improve its overall homeland security readiness capability by 20% by performing enhanced training and exercises and providing state-of-the-art equipment. Percentage improvement will be determined by an annual readiness survey and inspections.

In 2002 Establish a baseline of overall homeland security readiness capabilities through an annual survey mechanism.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Number of vulnerability assessments performed.			27	Assessments

Baseline: Based on FY 2002 performance, baseline is zero for number of critical Agency facilities that have had vulnerability assessments.

Research

Scientifically Defensible Decisions for Site Clean

In 2003 To ensure cost-effective and technically sound site clean-up, deliver state-of-the-art guidance and methods to EPA and stakeholders for risk management of fuel oxygenates; organic and inorganic contamination of sediments, ground water and/or soils; and oil spills.

In 2002 Provide at least 6 innovative approaches that reduce human health and ecosystem exposures from DNAPLs and MTBE in soils and groundwater, and from oil and persistent organics in aquatic systems.

In 2002 Provide new soil sampling methods, soil contaminant screening levels for chemicals that pose ecological risks, and generate specific statistical distributions for factors used in human health exposure assessments.

In 2001 EPA provided technical information to support scientifically defensible and cost-effective decisions for clean-up of complex sites, hard-to-treat wastes, mining, oil spills near shorelines, and Brownfields to reduce risk to human health and the environment.

Performance Measures:	**FY 2001 Actual**	**FY 2002 Enacted**	**FY 2003 Request**	**Units**
Interim report on monitored natural attenuation in sediments	1			document
Progress report on Field Demonstration of Chemically-Enhanced Subsurface Dense, Non-Aqueous Phase Liquid Extraction Technologies	1			report
Publish a technical Resource Document on the bioremediation of oil spills on marine shorelines. Provide oil spill response teams with a tool to assess appropriate applications of bioremediation.	1			document
Deliver the Annual SITE Program Report to Congress.	0			report
Annual SITE Program report to Congress detailing 4-6 innovative approaches, their cost savings and future direction; reports summarizing pilot scale evaluation of in-situ remedies for solvents.		1	1	report
Report on children's soil ingestion rates derived from environmental and biological measurements of arsenic.		1		report
Report on ecotoxicity soil screening levels for mammals, birds, soil plants, and soil biota for use in ecological risk assessments at Superfund sites.		1		tech report
Report: Permeable reactive barriers for ground water remediation; Incorporating the results of long-term performance studies in remedy selection for contaminated sites.			1	report

Baseline: Deliver state-of-the -art guidance and methods to EPA and other stakeholders for risk management of fuel oxygenates; organic and inorganic contamination of sediments, ground water and/or soils; and oil spills to ensure cost-effective and technically sound site clean-up. Baseline: There are a number of contaminants and/or media at Superfund, Leaking Underground Storage Tank (LUST) sites that are difficult to clean up. Methyl tert-Butyl Ether (MTBE), a fuel oxygenate found increasingly in US ground water/drinking water, requires clean up to low (ppb) levels but clean-up is expensive because of its chemical, physical and biological properties. Polynuclear aromatic hydrocarbons (PAH) are found at wood preserver sites and gas manufacturing plants, contain carcinogenic components and are difficult to cost-effectively clean up due to their high molecular weight. Arsenic (As) in ground water requires clean up to low levels due

to its impacts on humans and ecological systems. As treatment systems which perform for long periods of time are needed. We also need to understand the reasons why ground water As concentrations may naturally reduce over time. Bulk shipment/storage of non-petroleum oils (e.g. vegetable oils) can result in spills/leaks that have significant impacts on fresh water and marine environments. Inexpensive techniques are needed to clean up these spills without doing further harm to the environment. Research involving pilot and full scale treatment testing/demonstrations is particularly important when addressing these research needs because such research will lead to near-term options for effective, reasonable-cost clean-ups.

Verification and Validation of Performance Measures

Performance Measure (PM): LUST cleanups completed.

Performance Database: EPA does not maintain a national database for this information.

Data Source: Designated state agencies submit semi-annual progress reports to the EPA regional offices.

QA/QC Procedures: EPA regional offices verify the data and then forward them to the EPA Headquarters, where staff examine the data and resolve any discrepancies with the regional offices. The data are displayed in a document on a region-by-region basis, which allows regional staff to again verify their data.

Data Quality Reviews: None.

Data Limitations: This process relies on accuracy and completeness of state records.

New/Improved Data or Systems: None.

Performance Measure (PM): Superfund construction completions.

Performance Database: CERCLIS is the official database used by the Agency to track, store, and report Superfund site information.

Data Source: Data is entered on a rolling basis by EPA.

QA/QC Procedures: To ensure data accuracy and control, the following administrative controls are in place: 1) Superfund/Oil Implementation Manual (SPIM), the program management manual which details what data must be reported; 2) Report Specifications, which are published for each report detailing how reported data are calculated; 3) Coding Guide, which contains technical instructions to such data users as regional Information Management Coordinators (IMCs), program personnel, report owners and data input personnel; 4) Quality Assurance (QA) Unit Testing, which is an extensive QA check against report specifications; 5) QA Third Party Testing, an extensive test made by an independent QA tester to ensure that the report produces data in conformance with the report specifications; 6) Regional CERCLIS Data Entry Internal Control Plan, which includes: a) regional policies and procedures for entering data into CERCLIS, b) a review process to ensure that all Superfund accomplishments are supported by source documentation, c) delegation of authorities for approval of data input into CERCLIS, and, d) procedures to ensure that reported accomplishments meet accomplishment definitions; and 7) a historical lockout feature that has been added to CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a change log report.

Data Quality Review: Two audits, one by the Office of the Inspector General (OIG) and the other by the General Accounting Office (GAO), were done to assess the validity of the data in CERCLIS. The OIG audit report "Superfund

Construction Completion Reporting" (No. E1SGF7-05-0102- 8100030) was prepared to verify the accuracy of the information that the Agency was providing to Congress and the public. The OIG report concluded that the Agency "has good management controls to ensure accuracy of the information that is reported," and "Congress and the public can rely upon the information EPA provides regarding construction completions." GAO's report, "Superfund Information on the Status of Sites (GAO/RECD-98-241)," estimates that the cleanup status of National Priority List sites reported by CERCLIS is accurate for 95% of the sites.

Data Limitations: No data limitations have been identified.

New/Improved Data or Systems: In 2003, the Agency will continue its efforts begun in 1999 to improve the Superfund Program's technical information by incorporating more site remedy selection, risk, removal response, and community involvement information in CERCLIS. Efforts to share information among the federal, state, and tribal programs to further enhance the Agency's efforts to efficiently identify, evaluate and remediate Superfund hazardous waste sites will continue. In 2003, the Agency will also establish data quality objectives for program planning purposes and to ascertain the organization's information needs for the next five years. Adjustments will be made to EPA's current architecture and business processes to better meet the need.

Performance Measure (PM): High priority RCRA facilities with human exposures to toxins controlled; High priority RCRA facilities with toxic releases to groundwater controlled.

Performance Database: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database which supports EPA's RCRA program. RCRAInfo contains information on entities (generically referred to as "handlers") engaged in hazardous waste (HW) generation and management activities regulated under the portion of RCRA that provides for regulation of hazardous waste. RCRAInfo has several different modules, including a Corrective Action Module that tracks the status of facilities that require, or may require, corrective actions. A "yes" or "no" entry is made in the database with respect to meeting corrective action indicators. Supporting documentation and reference materials are maintained in regional and state files.

Human exposures controlled and toxic releases to groundwater controlled are used to summarize and report on the facility-wide environmental conditions at the RCRA Corrective Action Program's highest priority facilities. The environmental indicators are used to track the RCRA program's progress on getting highest priority contaminated sites under control. Known and suspected sitewide conditions are evaluated using a series of simple questions and flow-chart logic to arrive at a reasonable, defensible determination. These questions were issued as Interim Final Guidance on February 5, 1999. Lead regulators for the site (authorized state or EPA) make the environmental indicator determination; however, facilities or their consultants may assist EPA in the evaluation by providing information on the current environmental conditions.

Data Source: EPA regions and authorized states enter data on a rolling basis.

QA/QC Procedures: States and Regions generate the data and manage data quality related to timeliness and accuracy (i.e., the environmental conditions and determinations are correctly reflected by the data). Within RCRAInfo the application software enforces structural controls that ensure that high-priority national components of the data are properly entered. RCRAInfo documentation, which is available to all users on-line, provides guidance to facilitate the generation and interpretation of data. Training on use of RCRAInfo is provided on a regular basis, usually annually, depending on the nature of systems changes and user needs.

Data Quality Reviews: GAO's 1995 Report on PA's Hazardous Waste Information System reviewed whether national RCRA information systems support meeting the primary objective of helping EPA and states manage the hazardous waste program. Recommendations coincide with ongoing internal efforts (WIN/Informed) to improve the definitions of data collected, ensure that data collected provide critical information and minimize the burden on states

Data Limitations: No data limitations have been identified. As discussed above, environmental indicator determinations are made by the authorized states and EPA regions based on a series of standard questions and entered directly into RCRAInfo. EPA has provided guidance and training to states and regions to help ensure consistency in those determinations. High priority facilities are monitored on a facility-by-facility basis and the QA/QC procedures identified above are in place to help ensure data validity.

New/Improved Data or Systems: EPA has successfully implemented new tools for managing environmental information to support federal and state programs, replacing the old data systems (the Resource Conservation and Recovery Information System and the Biennial Reporting System) with RCRAInfo. RCRAInfo allows for tracking of information on the regulated universe of RCRA hazardous waste handlers, such as facility status, regulated activities, and compliance history. The system also captures detailed data on the generation of hazardous waste from large quantity generators and on waste management practices by treatment, storage, and disposal facilities. RCRAInfo is web accessible, providing a convenient user interface for federal, state and local managers, encouraging development of in-house expertise for controlled cost, and using commercial off-the-shelf software to develop reports from database tables.

Performance Measure (PM): Brownfields Cumulative site assessments; Brownfields Cumulative jobs generated; Brownfields Cumulative leveraging of cleanup and redevelopment funds.

Performance Database: The Brownfields Management System (BMS) is used to evaluate environmental, and economics-related results, such as properties assessed, acres cleaned up, and jobs generated. BMS uses data gathered from Brownfield pilots' quarterly reports and from the EPA regions. The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) records regional accomplishments on brownfields assessments in the Brownfields module. This database module tracks Targeted Brownfields Assessments (TBAs) on a property-specific basis. This module contains information such as: the property's operational status (e.g., "Active" or "Inactive"), prior use (e.g., "Disposal," "Production Facility," or "Midnight Dump"), the actual start and completion dates for the TBA, the phase of the TBA, and the outcome or result of the TBA.

Data Source: EPA headquarters and regional staff enter data on a rolling basis. Data are derived from grant recipient reports on Pilot and Targeted Brownfields Assessment projects.

QA/QC Procedures: Verification relies on reviews by regional staff responsible for pilot cooperative agreements or brownfields cooperative agreements and contracts.

Data Quality Reviews: The program and external organizations have conducted several data quality reviews. GAO conducted the most recent, "Brownfields: Information on the Programs of EPA and Selected States" (GAO-01-52. December 15, 2000). GAO recommended that EPA continue to review data reported by recipients before the Agency's new guidelines for results were put in place and make any corrections needed to ensure that the data are consistent with the current guidelines. GAO also recommended that EPA regions monitor and work to improve recipients' reporting of data on key results measures.

Data Limitations: The reporting of results of the Brownfields pilots is subject to the Paperwork Reduction Act and attendant OMB regulations governing information collection requests (ICR's), as well as the Agency's assistance regulations. Consequently, the Agency is limited to obtaining information from assessment pilot recipients on specific accomplishments attained with grant funds, such as properties assessed (40 CFR 35.6650(b)(1)). In addition, EPA may not require private sector entities, which do not receive EPA financial assistance, to provide information relating to such accomplishment measures as redevelopment dollars invested or numbers of jobs created. These constraints may lead to an underreporting of accomplishments.

New/Improved Data or Systems: In September 1999 EPA Headquarters issued guidance to the regions to standardize quarterly reporting of accomplishment measures for newly awarded and amended assessment grants. This guidance was

developed to ensure that the standardized information collected fell within the scope of regulations and the applicable OMB control number for quarterly reporting by assessment pilot recipients. EPA also is working with recipients to encourage the use of this standardized reporting through workshops and training. To improve recipients' reporting of data on key results measures, EPA has implemented GAO's recommendation that the Agency make it clear to recipients that follow-on awards depend on reported results.

Performance Measure (PM): Refer to DOJ, settle, or writeoff 100% of Statute of Limitations (SOLs) cases for Superfund sites with total unaddressed past costs equal to or greater than $200,000 and report value of costs recovered.

Performance Database: Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

Data Source: Automated EPA system; headquarters and EPA regional offices enter data into CERCLIS

QA/QC Procedures: To ensure data accuracy and control, the following administrative controls are in place: 1) Superfund/Oil Implementation Manual (SPIM), the program management manual that details what data must be reported; 2) Report Specifications, which are published for each report detailing how reported data are calculated; 3) Coding Guide, which contains technical instructions to such data users as regional Information Management Coordinators (IMCs), program personnel, report owners, and data input personnel; 4) Quality Assurance (QA) Unit Testing, an extensive QA check against report specifications; 5) QA Third Party Testing, an extensive test made by an independent QA tester to ensure that the report produces data in conformance with the report specifications; 6) Regional CERCLIS Data Entry Internal Control Plan, which includes: a) regional policies and procedures for entering data into CERCLIS, b) a review process to ensure that all Superfund accomplishments are supported by source documentation, c) delegation of authorities for approval of data input into CERCLIS, and, d) procedures to ensure that reported accomplishments meet accomplishment definitions; and 7) a historical lockout feature that has been added to CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a change-log report.

Data Quality Review: The IG annually reviews the end-of-year CERCLA data, in an informal process, to verify the data supporting the performance measure. Typically, there are no published results.

Data Limitations: None

New/Improved Data or Systems: None

FY 2003 Congressional Performance Measure (PM): PRPs conduct 70 percent of the work at new construction starts.

Performance Database: Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

Data Source: Automated EPA system; headquarters and EPA regional Offices enter data into CERCLIS

QA/QC Procedures: To ensure data accuracy and control, the following administrative controls are in place: 1) Superfund/Oil Implementation Manual (SPIM), the program management manual that details what data must be reported; 2) Report Specifications, which are published for each report detailing how reported data are calculated; 3) Coding Guide, which contains technical instructions to such data users as regional Information Management Coordinators (IMCs), program personnel, report owners, and data input personnel; 4) Quality Assurance (QA) Unit Testing, an extensive QA check against report specifications; 5) QA Third Party Testing, an extensive test made by an independent QA tester to ensure that the report produces data in conformance with the report specifications; 6) Regional CERCLIS

Data Entry Internal Control Plan, which includes: a) regional policies and procedures for entering data into CERCLIS, b) a review process to ensure that all Superfund accomplishments are supported by source documentation, c) delegation of authorities for approval of data input into CERCLIS, and, d) procedures to ensure that reported accomplishments meet accomplishment definitions; and 7) a historical lockout feature that has been added to CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a change-log report.

Data Quality Review: The IG annually reviews the end-of-year CERCLA data, in an informal process, to verify the data supporting the performance measure. Typically, there are no published results.

Data Limitations: None

New/Improved Data or Systems: None

Research

Verification and Validation of Performance Measures

FY 2003 Congressional Performance Measure (PM): Provide the SITE Program Report to Congress

Performance Database: Program output, no internal tracking system

Data Source: N/A

QA/QC Procedures: N/A

Data Quality Reviews**:** Report

Data Limitations: N/A

New/Improved Data or Systems: N/A

Statutory Authorities

Solid Waste Disposal Act as amended by Hazardous and Solid Waste Amendments of 1984 to the Resource Conservation and Recovery Act of 1976
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. 9601-9657
Defense Base Closure and Realignment Act of 1990, and the Defense Authorization Amendments and Base Realignment and Closure Act (BRAC) of 1990, Section 2905(a)(1)(E) (10 U.S.C. 2687 Note).
Pollution Prevention Act (PPA) (42 U.S.C. 13101-13109)
Oil Pollution Act 33 U.S.C.A.
Community Environmental Response Facilitation Act (CERFA)
National Environmental Policy Act (NEPA)
Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. (1970), and Reorganization Plan #3 of 1970
Uranium Mill Tailings Radiation Land Withdrawal Act of 1978
Public Health Service Act, as amended, 42 U.S.C. 201 et seq
Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, 42 U.S.C. 5121 et seq
Safe Drinking Water Act, 42 U.S.C. 300F et seq (1974)
Executive Order 12241 of September 1980, National Contingency Plan, 3 CFR, 1980

Executive Order 12656 of November 1988, Assignment of Emergency Preparedness Responsibilities, 3 CFR, 1988

Research

Comprehensive Environmental Response, Compensation, and Liabilities Act (CERCLA)
Response Conservation and Recovery Act (RCRA)
Oil Pollution Act (OPA)
Brownfields Revitalization and Environmental Restoration Act

Objective 2: Regulate Facilities to Prevent Releases

By 2005, EPA and its federal, state, tribal, and local partners will ensure that more than 277,000 facilities are managed according to the practices that prevent releases to the environment.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$1,003.0	$0.0	$0.0	$0.0
Civil Enforcement	$1,264.7	$1,512.0	$1,538.6	$26.6
Community Right to Know (Title III)	$4,861.1	$4,968.4	$4,953.1	($15.3)
Compliance Assistance and Centers	$267.9	$264.8	$271.4	$6.6
Congressionally Mandated Projects	$1,696.3	$2,100.0	$0.0	($2,100.0)
EMPACT	$160.5	$0.0	$0.0	$0.0
Facilities Infrastructure and Operations	$8,350.2	$9,712.1	$10,182.4	$470.3
Hazardous Waste Research	$6,990.0	$9,088.3	$9,548.7	$460.4
Homeland Security	$0.0	$7.0	$0.0	($7.0)
Legal Services	$2,249.0	$2,451.1	$2,633.3	$182.2
Management Services and Stewardship	$1,350.8	$2,135.7	$2,316.8	$181.1
Oil Spills Preparedness, Prevention and Response	$11,948.9	$11,795.4	$12,332.2	$536.8
Project XL	$126.4	$0.0	$0.0	$0.0
RCRA Improved Waste Management	$62,477.7	$61,174.6	$61,860.0	$685.4
RCRA State Grants	$27,433.2	$27,538.2	$27,538.2	$0.0
Radiation	$7,355.6	$7,000.5	$7,519.3	$518.8
Regional Management	$150.0	$177.8	$176.4	($1.4)

Risk Management Plans	$8,005.5	$7,202.9	$7,446.0	$243.1
UST State Grants	$11,918.4	$11,918.4	$11,918.4	$0.0
Underground Storage Tanks (UST)	$7,045.8	$6,795.7	$7,026.4	$230.7

Annual Performance Goals and Measures

UST Compliance

In 2003 EPA and its state and tribal partners will ensure that 80% of UST facilities will be in significant operational compliance with leak detection requirements, and 85% of UST facilities will be in significant operational compliance with spill, overfill and corrosion protection regulations.

In 2002 EPA and its state and tribal partners will ensure that 77% of UST facilities will be in significant operational compliance with leak detection requirements, and 82% of UST facilities will be in significant operational compliance with spill, overfill and corrosion protection regulations.

In 2001 The Agency now tracks the number of UST facilities in significant operational compliance with requirements, as opposed to the number of UST systems equipped to meet the requirements. For this reason, data on these two measures is not available and will not be available in the future.

Performance Measures:	**FY 2001 Actual**	**FY 2002 Enacted**	**FY 2003 Request**	**Units**
Percentage of USTs in compliance with the 1998 deadline requirements.	not available			compliance
Percentage of USTs in compliance with the leak detection requirements.	not available			compliance
Percentage of UST facilities in significant operational compliance with leak detection requirements.		77	80	percent
Percentage of UST facilities in significant operational compliance with spill, overfill and corrosion protection regulations.		82	85	percent

Baseline: EPA has worked with stakeholders to develop new measures that will account for significant operational compliance. Data are being collected in FY 2001 and a new baseline should be available in FY 2002.

Emergency Planning

In 2003 300 audits will be completed on RMP plans to determine completeness and accuracy, and 8 additional states (for a cumulative total of 25) will be implementing accident prevention programs.

In 2002 90% of facilities will be submitting RMPs, 2 states (for a cumulative total of 17) will be implementing accident prevention programs and 300 audits will be completed on RMP plans to determine completeness and accuracy.

In 2001 EPA met its goal, with 85% of facilities submitting RMPs, 5 additional states implementing Accident Prevention Programs, and 438 audits completed to determine RMP completeness and accuracy.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Percentage of facilities which have submitted RMPs.	85	90%		facilities
RMP audits completed.	438	300	300	audits
Number of states implementing accident prevention programs.	5	2	8	states

Baseline: By FY 2000, 75% of facilities were compliant with RMP requirements and 10 states were implementing accident prevention programs.

Oil Spill Prevention Compliance

In 2003 600 additional facilities will be in compliance with the Spill Prevention, Control and Countermeasure (SPCC) provisions of the oil pollution prevention regulations, for a cumulative total of 3,495 facilities since 1997.

In 2002 550 additional facilities will be in compliance with the Spill Prevention, Control and Countermeasure (SPCC) provisions of the oil pollution prevention regulations, for a cumulative total of 2,895 facilities since 1997.

In 2001 EPA confirmed an additional 593 facilities in compliance with spill prevention, control, and countermeasures (SPCC) provisions, for a cumulative total of 2,345 facilities in compliance since 1997.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Facilities in SPCC compliance.	593	550	600	facilities

Baseline: 1,752 facilities were in compliance in FY 2000.

Oil Spill Response

In 2003 Respond to or monitor 300 significant oil spills in the inland zone.

In 2002 EPA will respond to or monitor 300 significant oil spills in the inland zone.

In 2001 EPA significantly exceeded its goal by responding to 249 oil spills and monitoring 278 oil spills.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Oil spills responded to by EPA.	249			spills
Oil spills monitored by EPA.	278			spills
Oil spills responded to or monitored by EPA.		300	300	spills

Baseline: EPA typically responds to 70 oil spills and monitors 130 oil spill cleanups per year.

Ensure WIPP Safety

In 2003 Certify that 8,000 55 gallon drums of radioactive waste (containing approximately 24,000 curies) shipped by DOE to the Waste Isolation Pilot Plant are permanently disposed of safely and according to EPA standards.

In 2002 Certify that 6,000 55 gallon drums of radioactive waste (containing approximately 18,000 curies) shipped by DOE to the Waste Isolation Pilot Plant are permanently disposed of safely and according to EPA standards.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Number of 55-Gallon Drums of Radioactive Waste Disposed of According to EPA Standards		6,000	8,000	Drums

Baseline: The Waste Isolation Pilot Plant (WIPP) near Carlsbad, NM was opened in May 1999 to accept radioactive transuranic waste. By the end of FY 2002, approximately 13,000 (cumulative) 55 gallon drums will be safely disposed. In FY 2003, EPA expects that DOE will ship an additional 8,000 55 gallon drums of waste to WIPP so that 2.4% of the planned waste volume, based on disposal of 860,000 drums over the next 40 years, is permanently disposed of safely and according to EPA standards. Number of drums shipped to the WIPP facility on an annual basis is dependent on DOE priorities and funding. EPA volume estimates are based on projecting the average shipment volumes over 40 years with an initial start up.

RCRA Facility Standards and Compliance

In 2003 77.2% of the hazardous waste management facilities will have approved controls in place to prevent dangerous releases to air, soil, and groundwater. This represents an additional 39 facilities meeting the goal this year.

In 2002 75.8% of the hazardous waste management facilities will have approved controls in place to prevent dangerous releases to air, soil, and groundwater, representing an average increase of 39 additional facilities per year.

In 2001 An additional 249 hazardous waste management facilities have permits or other approved controls in place, for a cumulative total of 2,051 or 74% of the facility universe. The streamlined permitting standards rule was proposed October 12, 2001.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Propose final streamlined permitting standards	1			rulemaking
Percent RCRA hazardous waste management facilities with permits or other approved controls in place.	74%	75.8	77.2	percent
Promulgate final streamlined permitting standards.		1		rulemaking
Initiate training program for new permitting standards.			1	training

Baseline: EPA established a baseline of approximately 2,750 facilities in October 2000.

Tribal Prevention Assistance

In 2003 EPA will provide grants to those tribes identified as having facilities subject to the Emergency Planning and Community Right-to-know Act (EPCRA).

In 2003 EPA will evaluate RCRA Subtitle C management needs for an additional 36 Federally recognized tribes.

In 2003 EPA will facilitate closing or upgrading existing high-threat open dumps on Indian Lands.

In 2002 EPA will evaluate RCRA Subtitle C management needs for an additional 18 Federally recognized tribes.

In 2002 EPA will facilitate closing or upgrading existing high-threat open dumps on Indian lands.

In 2002 EPA will identify tribes where chemical facilities subject to Emergency Planning and Community Right to Know Act (EPCRA) requirements exists and have tribal emergency preparedness programs in place to address those risks.

In 2001 Data is currently unavailable for the open dumps cleanup project.

In 2001 EPA developed a tribal strategy to promote development of tribal chemical emergency preparedness programs.

In 2001 EPA evaluated the needs of 177 tribes in FY 2001.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Develop surveys and begin data collection.		1		data gathering
Provide funding assistance.			no target	grants
Development of draft strategy.	1			draft strategy
Tribes evaluated.	177	18	36	evaluations

Open dumps assessed.	not available	no target	no target	assessments
Open dumps upgraded to comply with Subtitle D landfill standards.	not available	no target	no target	upgrades
Open dumps with contents transferred and protections against future dumping in place.	not available	no target	no target	sites
Provide support and funding to tribes participating in the multi-Agency Tribal Open Dump Cleanup Project.		no target	no target	funding

Baseline: EPA is currently working to assess the number of tribes with chemical hazards on tribal lands.

Research

Scientifically Defensible Decisions for Active Man

In 2003 Deliver scientifically-enhanced 3MRA to OSW for their HWIR proposal and provide OSW/Regions with site-specific version of this exposure and risk assessment modeling system to implement HWIR and other applications for more cost-effective waste site management and protection of health and environment.

In 2001 EPA provided technical information to support RCRA regulatory development for waste identification, containment, and combustion.

Performance Measures:	**FY 2001 Actual**	**FY 2002 Enacted**	**FY 2003 Request**	**Units**
Update the HWIR99 modeling methodology for delisting hazardous wastes, in response to public comments on 1999 Federal Register Notice	1			update
Deliver science based enhancements to the 3MRA modeling system to support OSW's proposed HWIR and for conducting site-specific risk assessments.			1	model

Baseline: As a result of their regulatory reform efforts, OSW introduced in November 1999, a new open-architecture, multimedia, multipathway, and multi-receptor exposure and risk assessment (3MRA) methodology designed to support their Hazardous Waste Identification Rule (HWIR). Independent software testing, peer review on the system architecture and its internal science modules, and public comments on the Federal Register announcement are being addressed through refinements to the proposed modeling system. We also are improving some of the existing physical, chemical, and biological processes algorithms in the current system. The enhanced version will be used to support OSWs proposed HWIR (Proposal and Final Rule are expected about FY03 and FY05, respectively) which will update existing waste disposal regulations to eliminate possible over-regulation; 3MRA will serve as the scientific basis for establishing safe exit levels for certain wastes. The site-specific version will expand the screening level assessment capabilities to provide for site-specific exposure and risk assessments that will be used in HWIR implementation and other RCRA applications.

Verification and Validation of Performance Measures

Performance Measure (PM): Percentage of USTs in significant operational compliance with leak detection requirements; Percentage of USTs in significant operational compliance with spill, overfill and corrosion protection regulations.

Performance Database: EPA does not maintain a national database for this information.

Data Source: Designated state agencies submit semi-annual progress reports to the EPA regional offices.

QA/QC Procedures: EPA regional offices verify the data and then forward them EPA Headquarters, where staff examine the data and resolve any discrepancies with the regional offices. The data are displayed in a document on a region-by-region basis, which allows regional staff to again verify their data.

Data Quality Reviews: None.

Data Limitations: This process relies on accuracy and completeness of state records.

New/Improved Data or Systems: None.

Congressional Performance Measure (PM): Percent of RCRA hazardous waste management facilities with permits or other approved controls in place.

Performance Database: The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database which supports EPA's RCRA program. RCRAInfo contains information on entities (generically referred to as "handlers") engaged in hazardous waste (HW) generation and management activities regulated under the portion of RCRA that provides for regulation of hazardous waste. RCRAInfo has several different modules, including status of RCRA facilities in the RCRA permitting universe.

Data Source: EPA regions and authorized states enter data on a rolling basis.

QA/QC Procedures: States and Regions generate the data and manage data quality related to timeliness and accuracy (i.e., the environmental conditions and determinations are correctly reflected by the data). Within RCRAInfo the application software enforces structural controls that ensure that high-priority national components of the data are properly entered. RCRAInfo documentation, which is available to all users on-line, provides guidance to facilitate the generation and interpretation of data. Training on use of RCRAInfo is provided on a regular basis, usually annually, depending on the nature of system changes and user needs.

Data Quality Review: GAO's1995 Report on EPA's Hazardous Waste Information System reviewed whether national RCRA information systems support meeting the primary objective of helping EPA and states manage the hazardous waste program. Recommendations coincide with ongoing internal efforts (WIN/Informed) to improve the definitions of data collected, ensure that data collected provide critical information and minimize the burden on states.

Data Limitations: No data limitations have been identified.

New/Improved Data or Systems: EPA has successfully implemented new tools for managing of environmental information to support federal and state programs, replacing the old data systems (the Resource Conservation and Recovery Information System and the Biennial Reporting System) with RCRAInfo. RCRAInfo allows for tracking of information on the regulated universe of RCRA hazardous waste handlers, such as facility status, regulated activities, and compliance history. The system also captures detailed data on the generation of hazardous waste by large quantity

generators and on waste management practices from treatment, storage, and disposal facilities. RCRAInfo is web accessible, providing a convenient user interface for Federal, state and local managers, encouraging development of in-house expertise for controlled cost, using commercial off-the-shelf software to develop reports from database tables.

Performance Measure: Number of drums of radioactive waste disposed of according to EPA standards.

Performance Data: The Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP) database contains the number of drums shipped by DOE waste generator facilities and placed in the DOE WIPP.

Data Source: Department of Energy

QA/QC Procedures: The performance data used by EPA are collected and maintained by DOE. Under EPA's WIPP regulations, all DOE WIPP-related data must be collected and maintained under a comprehensive quality assurance program meeting consensus standards developed by the American Society of Mechanical Engineers (ASME). EPA conducts regular inspections to ensure that these quality assurance systems are in place and functioning properly; no additional QA/QC of the DOE data is conducted by EPA.

Data Limitations: The DOE WIPP database contains the number of drums shipped by DOE waste generator facilities and placed in the DOE WIPP. Currently, there are five DOE waste generator facilities, Los Alamos National Laboratory, Rocky Flats Environmental Technology Site, Hanford Site, Idaho National Engineering and Environmental Laboratory, Savannah River Site that are approved to generate and ship waste.

Before DOE waste generator facilities can ship waste to the WIPP, EPA must approve the waste characterization controls and quality assurance procedure for waste identification at these sites. EPA conducts frequent independent inspections and audits at these sites to verify continued compliance with radioactive waste disposal standards and to determine if DOE is properly tracking the waste and adhering to specific waste component limits. Since 1998, EPA has completed over 30 inspections prior to shipment of waste to the WIPP facility.

Once EPA gives its approval, the number of drums shipped to the WIPP facility on an annual basis is dependent on DOE priorities and funding. EPA volume estimates are based on projecting the average shipment volumes over 40 years with an initial start up.

New/Improved Data or Systems: None

Statutory Authorities

Solid Waste Disposal Act as amended by the Hazardous and Solid Waste Amendments of 1984
Title III (Emergency Planning and Community Right-to-Know Act) of CERCLA, as amended by Superfund Amendments and Reauthorization Act (SARA) of 1986
Clean Air Act Section 112
Waste Isolation Pilot Plant Land Withdrawal Act of 1992, P.L. 102-579
Nuclear Waste Policy Act of 1982, P.L. 97-425
Energy Policy Act of 1992, P.L. 102-486
Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. (1970), and Reorganization Plan #3 of 1970
Uranium Mill Tailings Radiation Land Withdrawal Act of 1978
Public Health Service Act, as amended, 42 U.S.C. 201 *et seq.*
Chemical Safety Information, Site Security and Fuels Regulatory Release Act, 1999.
Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, 42 U.S.C. 5121 et seq.
Executive Order 12241 of September 1980, National Contingency Plan, 3 CFR, 1980
Executive Order 12656 of November 1988, Assignment of Emergency Preparedness Responsibilities, 3 CFR, 1988

Oil Pollution Act (OPA), 33 U.S.C. 2701 *et seq*..
Clean Water Act (CWA), Section 311.
Safe Drinking Water Act, 42 U.S.C. 300F et seq. (1974)
Clean Air Act Section 112

Research
Solid Waste Disposal Act (SWDA)
Resource Conservation and Recovery Act (RCRA)
Hazardous and Solid Waste Amendments (HSWA)
The Clean Air Act Amendments (CAA)